

E-Newsletter-Vol - VII

LIGHT HOUSE PROJECTS

August 10, 2021, New Delhi

Hon'ble Prime Minister Talks About Transformation in Construction Sector Through Use of New Technologies

MANN KI BAAT



“There was a time when it would take years to complete even a minor construction. But today due to technology the situation is changing in India. Some time ago we had launched a Global Housing Technology Challenge to invite such innovative companies from all over the world. This is a unique attempt of its kind in the country; hence we gave it the name Light House Projects.”

- Hon'ble Prime Minister

In his 79th 'Mann Ki Baat' address to the nation, Hon'ble Prime Minister highlighted about the use of new technologies in the housing sector. He said that Global Housing Technology Challenge-India (GHTC-India) is a unique attempt of its kind in the country under which Light House Projects (LHPs) have taken off in six cities of India, namely Chennai (Tamil Nadu), Lucknow (Uttar Pradesh), Indore (Madhya Pradesh), Rajkot (Gujarat), Ranchi (Jharkhand) and Agartala (Tripura).

“For now, work on Light House Projects is on at a fast pace at six different locations in the country. Modern technology and innovative methods are used in these Light House Projects. This reduces the duration of construction. Along with that, the houses that are constructed are more durable, economical and comfortable,” Hon'ble Prime Minister said. The foundation stone of the projects was laid by Hon'ble Prime Minister on 1st January 2021.

Hon'ble Prime Minister described the project in detail and explained about each of the technology in use at the LHP sites. In the project at Indore, 'Prefabricated Sandwich Panel System with Pre-engineered Steel Structural System' technology is being used in place of brick-and-mortar walls. In Rajkot, houses are being built using French technology 'Monolithic Concrete Construction using Tunnel Formwork'. Houses made with this

technology will be lot more capable of withstanding disasters. In Chennai, 'Precast Concrete Construction System-Precast Components Assembled at Site' technologies from America and Finland are being used. By this, houses will get built faster and the cost too will be low. In Ranchi, houses are being built using the 'Precast Concrete Construction System - 3D Volumetric' technology of Germany. In this, every room will be constructed separately and then the entire structure will be joined together the way block toys are joined. In Agartala, using 'Light Gauge Steel Framed (LGSF) System with Pre-engineered Steel Structural System' technology from New Zealand, houses that can withstand major earthquakes are being made with steel frame. Meanwhile, in Lucknow 'Stay In Place PVC Formwork with Pre-Engineered Steel Structural System' technology from Canada is being used. In this plaster and paint will not be required and walls prepared in advance will be used to build houses faster.

“Today an attempt is being made in the country to ensure that these projects work as incubation centres. Through this our planners, architects, engineers and students will know of new technology and experiment with them too. I am sharing these things especially with our youth so that in the interest of the nation they are encouraged towards technology in newer fields,” Hon'ble Prime Minister added.

TECHNOGRAHIS VISIT TO LIGHT HOUSE PROJECT SITES AT RAJKOT AND LUCKNOW

The Light House Project (LHP) sites at Rajkot and Lucknow witnessed an enthusiastic response by the Technograhis, which comprised of a group of students, engineers, professors and other stakeholders interested in learning the use of innovative construction technologies. At the six LHP locations, Ministry of Housing & Urban Affairs (MoHUA) has initiated on-site training sessions for Technograhis.

In Rajkot, over 40 Technograhis visited the LHP site to understand and learn about Monolithic Concrete Construction using Tunnel Formwork being used to construct 1,144 houses in the city. Their technical on-site training session was taken by the Executive Director (ED) & Engineers of Building Materials and Technology Promotion Council (BMTPC). The Technograhis were keen and eager to mainstream the technology whenever they get opportunity in field.

Technograhis at LHP Rajkot



Technograhis at LHP Lucknow



In Lucknow, the training programme was organised by BMTPC in coordination with State Urban Development Agency (SUDA), Uttar Pradesh. Close to 40 Technograhis, including engineers/officials from SUDA, UP Awas Vikas Parishad (UPAVP), Lucknow Development Authority (LDA), scientists from Central Institute of Petrochemicals Engineering & Technology (CIPET), students from local engineering colleges, came forward for the training. They were briefed about innovative construction technologies and their nitty-gritties. The Technograhis were also taken to the site where they were explained about the Stay In Place PVC Formwork with Pre-Engineered Steel Structural System being used to construct 1,040 houses in Lucknow.

MoHUA is promoting these LHPs as Live Laboratories for transfer of technologies to the field, which includes planning, design, production of components, construction practices and testing in Indian context.

Apart from conducting site visits, the Ministry has also facilitated an e-Course for Technograhis, wherein one can learn about the LHP technologies, their use and take a tour of the sites virtually. The details are available at GHTC-India website (<http://ghtc-india.gov.in/>).

PROGRESS OF LIGHT HOUSE PROJECTS AS ON AUGUST 10, 2021

CHENNAI, Tamil Nadu

Technology Name: **Precast Concrete Construction System-Precast Components Assembled at Site**



No. of Dwelling Units	: 1152 Nos. (6+5)
No. of Block / Tower	: 12 Blocks
Units in each Block / Tower	: 96 Nos.

Activities	Progress
Superstructure Work	<ul style="list-style-type: none"> • Ground Floor work completed in all blocks. • First Floor work completed in all blocks. • Second Floor work in progress –1 block • Third Floor work in progress –1 block • Fourth Floor work in progress –3 blocks • Fifth Floor work in progress –7 blocks
Sample unit	Completed
Internal work (Electrical, Plumbing etc.)	In progress – 5 blocks
Masonry work	In all blocks at different floors



INDORE, Madhya Pradesh

Technology Name: **Prefabricated Sandwich Panel System with Pre-engineered Steel Structural System**



No. of Dwelling Units	: 1024 Nos. (S+8)
No. of Block / Tower	: 8 Blocks
Units in each Block / Tower	: 128 Nos.

Activities	Progress
Superstructure work	<ul style="list-style-type: none"> • Ground Floor Shear wall work in progress - 8 blocks • Ground Floor Pre-engineered Steel (PEB) erection work in progress - 3 blocks (B-3,4,2)
Infrastructure Work	<ul style="list-style-type: none"> • Boundary wall, Community Centre, Solid Waste Management Plant work, Road work & Sewer line work is in progress • Steel (PEB) erection work in Community Centre & Electric Sub-station work is in progress



PROGRESS OF LIGHT HOUSE PROJECTS AS ON AUGUST 10, 2021

LUCKNOW, Uttar Pradesh

Technology Name: **Stay In Place PVC Formwork with Pre-Engineered Steel Structural System**



No. of Dwelling Units : **1040 Nos. (S+13)**
 No. of Block / Tower : **4 Blocks**
 Units in each Block / Tower : **A(494), B(130), C(208) & D(208)**

Activities	Progress
Foundation (Dwelling Units)	
Raft, Column upto Plinth	Completed – 4 Blocks
Plinth Beam & Anchor Bolts	Completed – 3 blocks In progress – 1 block
Superstructure work	<ul style="list-style-type: none"> Ground Floor Shear wall (Staircase & Lift well) work in progress in all Blocks Ground Floor Pre-engineered Steel (PEB) erection work in progress - 2 Blocks (Block A & C)
Infrastructure work	Community Block - PCC Completed Commercial Block- Excavation Completed



RAJKOT, Gujarat

Technology Name: **Monolithic Concrete Construction using Tunnel Formwork**



No. of Dwelling Units : **1144 Nos. (S+13)**
 No. of Block / Tower : **11 Blocks**
 Units in each Block / Tower : **104 Nos.**

Activities	Progress
Foundation (Dwelling Units)	
Excavation & PCC	Yet to Start – 1 Block Excavation – 1 Block
RCC Footing / Raft	In progress – 2 Blocks
RCC wall upto Plinth beam	Completed – 5 Blocks
Superstructure work	Block No. 8 – Ground +9 completed Block No. 9 – Ground +8 in progress
Infrastructure work	Community Hall, footing work is in progress



PROGRESS OF LIGHT HOUSE PROJECTS AS ON AUGUST 10, 2021

AGARTALA, Tripura

Technology Name: **Light Gauge Steel Framed (LGSF) System with Pre-engineered Steel Structural System**



No. of Dwelling Units : **1000 Nos. (G+6)**
 No. of Block / Tower : **7 Blocks**
 Units in each Block / Tower : **A(112), B(154), C(118), D(168), E(168), F(168) & G(112)**

Activities	Progress
Foundation (Dwelling Units)	
Pile	Completed – 1 Block In progress – 4 Blocks Yet to be taken up – 2 Blocks
Pile capping & Plinth beam	Yet to be taken up



RANCHI, Jharkhand

Technology Name: **Precast Concrete Construction System – 3D Volumetric**



No. of Dwelling Units : **1008 Nos. (G+8)**
 No. of Block / Tower : **7 Blocks**
 Units in each Block / Tower : **144 Nos.**

Activities	Progress
Status of statutory approvals & Site mobilization	<ul style="list-style-type: none"> Architectural drawings have been approved & process of getting Environment clearance is in advance stage Way for setting up of casting yard at site is in progress. PEB structures have been procured at site Structural design /drawings have been submitted to IIT Bombay for vetting Identification of beneficiaries is in progress



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Online classes for sixth batch will start from 27th August 2021.

More details: <https://ict.bmtpc.org/Default.aspx>

SOCIAL MEDIA CORNER



PMO India
@PMOIndia

During #MannKiBaat, PM @narendramodi highlights a unique effort associated with @iitmadras and speaks about ways of invigorating the housing sector with new technology.



Hardeep Singh Puri · Jul 25

In today's #MannKiBaat program, PM @narendramodi Ji praised the efforts being made by using cutting edge construction technologies from across the world to speed up the process of construction & urbanization in India.

@PMOIndia



Hardeep Singh Puri
@HardeepSPuri

Replying to @HardeepSPuri

Six lighthouse projects have been identified in Chennai, Lucknow, Indore, Rajkot, Ranchi & Agartala. State-of-the-art technologies selected through Global Housing Technologies Challenge 2021 have been deployed at these sites.



Hardeep Singh Puri
@HardeepSPuri

Replying to @HardeepSPuri

The Light House Projects are a part of the visionary PMAY-Urban Mission conceptualised by Hon'ble PM under which the govt is constructing 1.12 crores houses. I feel privileged to be a part of the team which is implementing this mission to provide #HousingForAll by 2022.



Durga Shanker Mishra · Jul 26

Real Estate Sector & Ministry of Housing & Urban Affairs are extremely grateful to the Hon'ble PM for acknowledging the huge transformation taking place in construction technology across the country to translate his vision in the #MannKiBaat program today.



youtube.com

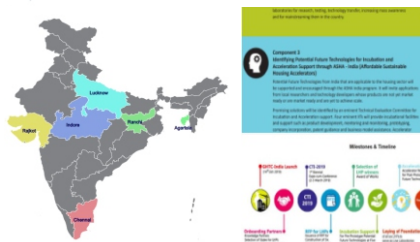
PM Narendra Modi talks about new technologies i...
During Mann Ki Baat on 25th July '21, PM Narendra Modi shared the latest technologies being used by ...



Durga Shanker Mishra · Jul 26

Replying to @Secretary_MoHUA

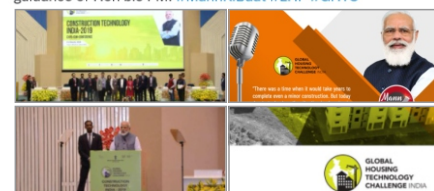
The Hon'ble PM inaugurated the Conference-cum-Expo in March 2019, where he declared 2019-20 as the "Construction Technology Year" & laid the path for this journey. #MannKiBaat #LHP #GHTC



Durga Shanker Mishra
@Secretary_MoHUA

Replying to @Secretary_MoHUA

The Ministry conceptualised Global Housing Technology Challenge - India (GHTC-I) under the guidance of Hon'ble PM. #MannKiBaat #LHP #GHTC



PIB India · Jul 25

At present, work is going on at a rapid pace on Light House Projects at 6 different places in the country. Modern technology and innovative methods are used in these Light House Projects: PM @narendramodi

#MannKiBaat



Housing For All
@PMAYUrban

A step towards bringing a paradigm shift in affordable housing sector!

#LightHouseProjects, MoHUA's initiative of transforming the construction sector, gets a special mention by Hon'ble Prime Minister during #MannKiBaat.



Housing For All · Aug 2

Watch: Construction activities at #LightHouseProject site in Indore is in full swing. As the project completes 6 months of implementation, here's a glimpse of the work in progress.



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